Project Design Phase-IITechnologyStack(Architecture&Stack)

Date	16November2022
TeamID	PNT2022TMID32337
ProjectName	AIbaseddiscourseforBankingIndustry
MaximumMarks	4 Marks

TechnicalArchitecture:
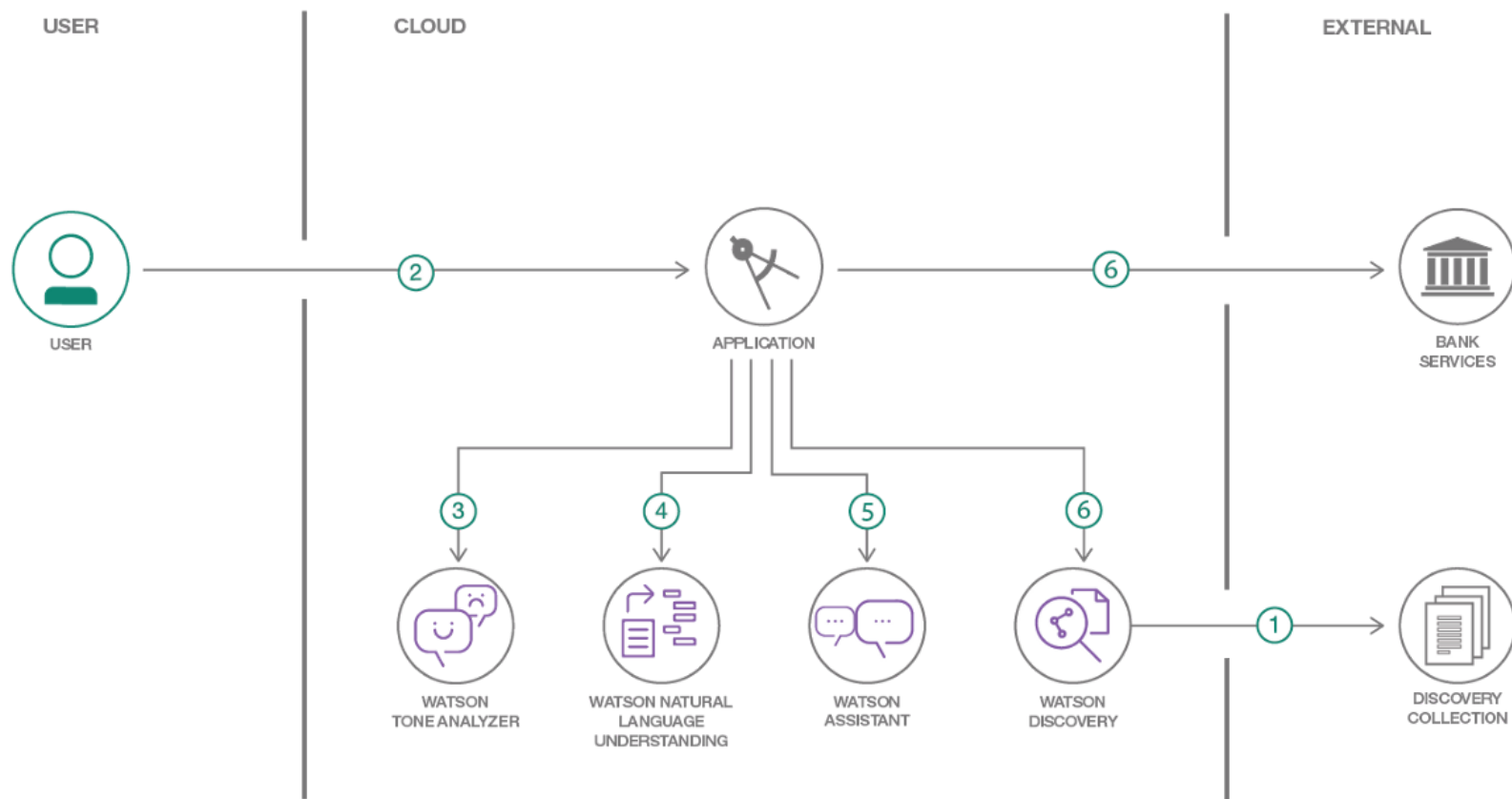
Table-1:Components&Technologies:

S.No	Component	Description	Technology
1.	UserInterface	Interface through which the user interacts withapplication.	Python/Flask
2.	ApplicationLogic-1	The systemistrainedin suchawaythat itsolves queriesrelated toSavingsAccount	IBMWatsonAssistant
3.	ApplicationLogic-2	The systemistrainedinsuch awaythat itsolvesqueries relatedtoLoanqueries.	IBMWatsonAssistant
4.	ApplicationLogic-3	The systemistrainedinsuch awaythat itsolvesqueriesregardingNetBankingandothergeneral queries.	IBMWatson Assistant
5.	CloudDatabase	DatabaseServiceon Cloud	IBMDB2,IBMCloudant.
6.	MachineLearningModel	Machinelearningmodelshelpintheprocessofenchancingchatbotresponses.	NaturalLanguagesProcessing
7.	Infrastructure(Server/Cloud)	Chatbotwouldbeintegrated toaflaskwebpageanddeployedonaCloudServer	Local,IBMCloud.

Table-2:ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1.	Open-SourceFrameworks	The proposed model is incorporated with Flaskwhichisanopen-sourceframeworkused fordevelopingwebapplicationsusingpython,implementedonWerkzeugandJinja2.	Flask
2.	SecurityImplementations	IBM Cloud encrypts the data in database andstorage services with built-in encryption. Forhigher levels of data protection, you can managethe encryption keys that encrypt the data at rest.Forsensitivedata,gaincontrolofencryption keysby usingBringYourOwnKey(BYOK)withIBM CloudKeyProtect.	IBMCloud

S.No	Characteristics	Description	Technology
3.	ScalableArchitecture	The chat bot can be enchanced by creating andaddingintentsandbybuildingdialog,actionskills.	IBMWatson Assistant
4.	Availability	The chatbotis madeavailable24*7	IBMWatson Assistant
5.	Performance	Watson Assistant provides customers with fast,consistent and accurate answers across anyapplication, device or channel. Using AI, WatsonAssistant learns from customer conversations,improvingitsabilityto resolveissuesthefirst timewhileremovingthefrustrationof longwait times, tedioussearchesandunhelpfulchatbots.	IBMWatson Assistant